

Validations for Service Providers

June 22, 2004

This document describes two changes from the previous version of CGAP. The first section summarizes the changed items. The table that follows contains all the validations, with the validations that have been revised for July highlighted in different colors.

Note

- Service Providers should focus only on **blue shaded** items for the June receipt date. The changes for the July receipt date are in yellow. The latest changes are in gray.
- Service Providers should be aware that a change was made to the Information Request Message, to change the Organization Identifier from IPF Code to DUNS Number. It is not in this document because it is not a validation change.

Changes in this Version

- **July**—The validations on SalariesWagesTotal, SalaryRequested, and FringeBenefits have been changed. The validation on SalariesWagesTotal (if specified, must equal the sum of SalaryRequested and FringeBenefits) is applicable only for budget period 1. The validation on SalaryRequested (if specified, must equal the sum of RequestedCost for each person) is now enforced only for budget period 1. The validation on FringeBenefits (if specified, must equal the sum of FringeCost for each person) is now enforced only for budget period 1.
- **July**—The elements RevisionOfApplicationNumber.SuffixCode and PriorGrantNumber.SuffixCode are no longer mandatory.

Summary of Changes for the June pilot

- **Removed validation if the same degree code is submitted more than once in an application.**
- Added warning message on degrees (1.2.1.5.15.6), if no degrees were submitted through the data stream.
- Changed type on Phase 3 Clinical Trial Question (1.2.1.1.1.5) to Boolean from String, to be consistent with schema.
- Changed IACUCApprovalPending (1.2.1.1.2.4) size from 7 to 0, to be consistent with schema.
- Changed type from Boolean to String, and Max Size from 1 to 0, for the following components, to be consistent with schema: InventionsPreviouslyReported (1.2.2.3.2.1), InventionsNotPreviouslyReported (1.2.2.3.2.2), and NoInventions (1.2.2.3.2.3).
- Included instructions for ignoring hyphens, parentheses, other punctuation, or embedded spaces when comparing zip code or phone number elements against the Commons (1.2.1.5.15.5).

Summary of Changes for the July pilot

Revisions

- **Added definitions for prior grant for competing continuation and revision. See new table following the validations table.**
- Clarified requirement for CategoryIdentifier (1.2.1.5.2.1) to indicate that valid values are 'N', 'C', or 'R'.
- If CategoryIdentifier (1.2.1.5.2.1) = 'C', CompetingContinuationQualifiers component (1.2.2.3) is mandatory.
- Accept revisions (1.2.2.2)
- If CategoryIdentifier='R', RevisionOfApplicationNumber (1.2.2.2) is mandatory and must be valid.
- RevisionOfApplicationNumber (1.2.2.2): all subcomponents are required if this component is present, but only IC and serial number are validated.
- RevisionOfApplicationNumber (1.2.2.2): The prior grant must not have been awarded, unless it has been identified as interim funding.
- **For revision, if PChangeIndicator is not set, PI must be assigned to a grant with the same IC and serial number as the PriorGrantNumber (1.2.2.2).**
- **For revision, summary statement for prior grant must have been sent (1.2.2.2).**
- **Provide warning on third revision and rejection of fourth revision (1.2.2.2).**
- CompetingContinuationQualifiers component (1.2.2.3): all subcomponents are required if this component is present, but only IC and serial number are validated.
- **For revision, require submittal of introduction attachment (limited to three pages) (1.2.2.8.1).**
- RevisedApplicationIntroAttachment (1.2.2.8.1) required if CategoryIdentifier='R'.
- Clarified wording on Preliminary Studies (1.2.2.8.3.3)
- Clarified requirement for ProgressReport (1.2.2.8.3.4): for revisions, Progress Report is required if revision is for a Competing Continuation, not if it is for a new application.
- For R03 submissions, the Introduction is limited to one page.

Full Budgets

- Changed requirement for <BudgetPeriod><StartDate> (1.2.1.3.3.2): the start date must be the same as Project Start Date *only* for type 1 applications. It does not apply to Competing Continuations.
- For detailed budget, mandatory subcomponents of SalariesAndWages (1.2.1.3.3.6) must be included for budget period 1.
- Detailed Budget AccountIdentifier (1.2.1.3.3.6.1): Required for PI, but not for other key personnel; if supplied, must be a valid Commons account; for the PI/PD, must be the same account specified for the PI in 1.2.1.4.2

- For Detailed Budget Name (1.2.1.3.3.6.2), included algorithm for determining an acceptable match between names.
- **Changed requirements for <SalariesAndWages><ProjectRole> (1.2.1.3.3.6.3) and <ProjectRoleDescription> (1.2.1.3.3.6.4). New requirements:**
 - **Valid values for project role are ‘PI/PD’ (in which case Description must not be entered) and ‘Other’ (in which case Description must be entered).**
 - **There must be at least one record with a project role of PI/PD.**
 - **Changed the length from 3 to 25.**
- If BaseSalary is specified, RequestedCost (1.2.1.3.3.6.8) must be less than or equal to BaseSalary multiplied by PercentEffort.
- If specified, SalaryAndFringeTotal (1.2.1.3.3.6.11) must equal the sum of RequestedCost and FringeCost.
- EquipmentCosts component (1.2.1.3.3.7) is optional, but if included, indicated subcomponents must be included. Cost and Description subcomponents redefined as mandatory.
- Moved error message (The Other Direct Costs cannot have more than one <Type Name> account type) from OtherDirectCostsType (1.2.1.3.3.10.1) to entry for OtherDirectCosts (1.2.1.3.3.10).
- Added error message to OtherDirectCostsType (1.2.1.3.3.10.1) to correspond to validation on allowable OtherDirectCost types.
- OtherDirectCosts Description (1.2.1.3.3.10.3) must be included if an OtherDirectCost Type of ‘Consultant’, ‘Travel’, ‘Alterations’, or ‘Other’ has been included.
- If specified, SalariesWagesTotal (1.2.1.3.3.11) for budget period 1 must equal the sum of SalaryRequested and FringeBenefits.
- **Validation rules that have been previously defined for modular budgets now apply only if response to Modular Budget Question is true (1.2.1.3.3.16).**
- If response to ModularBudgetQuestion is FALSE, PeriodDirectCostsTotal (1.2.1.3.3.16) must be equal to the sum of BudgetSummary.BudgetPeriod.NonConsortiumDirectCostSubtotal, BudgetSummary.BudgetPeriod.ConsortiumCosts.DirectCosts, and BudgetSummary.BudgetPeriod.ConsortiumCosts.IndirectCosts
- **Provide warning if direct costs for any single year are greater than \$500K. (1.2.1.3.3.16).**
- **Provide warning if submitted as non-modular and \$250K or less (1.2.1.3.3.16).**
- If specified, SalaryRequested (1.2.1.3.3.20.1) must equal the sum of RequestedCost for each person for budget period 1.
- If specified, FringeBenefits (1.2.1.3.3.20.2) must equal the sum of FringeCost for each person for budget period 1.
- If specified, NonConsortium DirectCostSubtotal (1.2.1.3.3.21) must equal the sum of totals included for detailed budget.

- Budget Justification Text (1.2.1.3.4.1) must be supplied if any of the following applies:
 - BaseSalary is specified and RequestedCost is less than BaseSalary multiplied by PercentEffort.
 - OtherDirectCost Type of ‘Consultant’, ‘Travel’, ‘Alterations’, or ‘Other’ has been included
 - EquipmentCosts has been included
- If response to ModularBudgetQuestion is FALSE, BudgetDirectCostsTotal (1.2.1.3.5) must be equal to the sum of PeriodDirectCostsTotal for each budget period.
- **Modular budget question may now be either True or False (1.2.1.3.9)**
- AccountIdentifier (1.2.1.4.2) must be specified for the PI/PD.
- The sum of PeriodDirectCostsTotal (1.2.1.3.3.16) and IndirectCosts (1.2.1.3.3.22.2) must be equal to PeriodCostsTotal (1.2.1.3.3.18) for the corresponding budget period.

Validations Table

Level	Component Path	Type	Max Size	Mandator y	Validation
1	CompetingGrantApplicati on	N/A	N/A	N/A	
1.1	ProjectTypeCode	String	1	Yes	Must be P for initial release
1.2	ResearchProjectDetails	N/A	N/A	N/A	
1.2.1	ResearchAndRelatedProje ct	N/A	N/A	N/A	
1.2.1.1	ProjectDescription	N/A	N/A	N/A	
1.2.1.1.1	HumanSubject	N/A	N/A	N/A	
1.2.1.1.1.1	HumanSubjectsUsedQuest ion	Boolea n	1	Yes	Either ExemptionNumber or AssuranceNumber must be specified if HumanSubjectUsedQuestion is true. If HumanSubjectsUsedQuestion is false, ExemptionNumber must not be specified. If HumanSubjectsUsedQuestion is false, provide a warning if AssuranceNumber is specified.
1.2.1.1.1.2	ExemptionNumber	String	2	No	Must be “1” through “6”
1.2.1.1.1.3	AssuranceNumber	String	12	No	
1.2.1.1.1.4	IRBApprovalDate	N/A	N/A	N/A	
1.2.1.1.1.5	Phase3ClinicalTrialQuestio n	Boolea n	1	Yes	
1.2.1.1.2	AnimalSubject	N/A	N/A	N/A	
1.2.1.1.2.1	VertebrateAnimalsUsedQu estion	Boolea n	1	Yes	If VertebrateAnimalsUsedQuestion is true, then ONE of the following must be provided: <ul style="list-style-type: none"> • AssuranceNumber + IACUCAApprovalDate • AssuranceNumber + IACUCAApprovalPending • IACUCAApprovalPending
1.2.1.1.2.2	AssuranceNumber	String	10	No	Provide a warning if VertebrateAnimalsUsedQuestion is false
1.2.1.1.2.3	IACUCAApprovalDate	Date	N/A	No	Provide a warning if VertebrateAnimalsUsedQuestion is false
1.2.1.1.2.4	IACUCAApprovalPending	String	0	No	Provide a warning if VertebrateAnimalsUsedQuestion is false
1.2.1.1.3	ProjectSurvey	N/A	N/A	N/A	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.1.4	FacilitiesDescription	N/A	N/A	Yes	
1.2.1.1.4.1	FileIdentifier	PDF	50 pages	Yes	
1.2.1.1.4.2	Text	N/A	N/A	No	
1.2.1.1.5	EquipmentDescription	N/A	N/A	Yes	
1.2.1.1.5.1	FileIdentifier	PDF	50 pages	Yes	
1.2.1.1.5.2	Text	N/A	N/A	No	
1.2.1.1.6	References	N/A	N/A	N/A	
1.2.1.1.7	ProjectSummary	N/A	N/A	N/A	
1.2.1.1.7.1	FileIdentifier	PDF	50 pages	Yes	
1.2.1.1.7.2	Text	N/A	N/A	No	
1.2.1.2	OrgAssurances	N/A	N/A	N/A	
1.2.1.2.1	GeneralCertificationQuestion	N/A	N/A	N/A	
1.2.1.2.2	LobbyingQuestion	Boolean	1	Yes	
1.2.1.2.3	DrugFreeWorkplace	N/A	N/A	N/A	
1.2.1.2.3.1	YesNoAnswer	Boolean	1	Yes	
1.2.1.2.3.2	Explanation	String	2000	No	Required if YesNoAnswer is false
1.2.1.2.4	DebarmentAndSuspension	N/A	N/A	N/A	
1.2.1.2.4.1	YesNoAnswer	Boolean	1	Yes	
1.2.1.2.4.2	Explanation	String	2000	No	Required if YesNoAnswer is false
1.2.1.2.5	SBIR Survey	N/A	N/A	N/A	
1.2.1.3	BudgetSummary	N/A	N/A	N/A	
1.2.1.3.1	InitialBudgetTotals	N/A	N/A	N/A	
1.2.1.3.2	AllBudgetTotals	N/A	N/A	N/A	
1.2.1.3.3	BudgetPeriod	N/A	N/A	N/A	
1.2.1.3.3.1	BudgetPeriodID	Integer	2	Yes	Must be an incremental number starting with 1. There can be at most 5 budget periods.
1.2.1.3.3.2	StartDate	Date	N/A	Yes	For budget period 1, for new applications and revisions to new applications, must be the same as the Project StartDate. This validation does not apply to Competing Continuations
1.2.1.3.3.3	EndDate	Date	N/A	Yes	
1.2.1.3.3.4	ProgramIncome	N/A	N/A	No	
1.2.1.3.3.5	Fee	Double	10	No	
1.2.1.3.3.6	SalariesAndWages	N/A	N/A	N/A	ModularBudgetQuestion MUST be FALSE Mandatory subcomponents must be included for budget period 1.
1.2.1.3.3.6.1	AccountIdentifier	String	30	No	Required when ProjectRole='PI' / 'PD' If specified, must be a valid Commons account For the PI/PD, must be the same account specified for the PI in 1.2.1.4.2

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.3.3.6.2	Name	N/A	N/A	No	<p>If AccountIdentifier is supplied, must match name on the account. If AccountIdentifier is not supplied, this element is required. The algorithm for determining an acceptable match between names is as follows:</p> <ul style="list-style-type: none"> All elements of the name (first, last, middle, prefix, suffix) shall be compared <i>without</i> case sensitivity. All elements of the name shall be compared without regard to embedded spaces. Embedded punctuation <i>shall</i> be considered when making comparisons. Middle name does not need to match exactly. If the middle names do not match, but this is because the Commons or data stream is providing a middle initial only, then a second attempt will be made, using only the first character of the middle name. If there is <i>still</i> no match based on middle initial, this will be considered a fatal error condition. If the middle initials match, this will be considered a <i>warning</i> condition. <p>If provided with the data stream, the name prefix must match the Commons exactly. It is forgivable to exclude the prefix in the data stream, since this is not a critical element in a personal identification. However, if given, we must verify that it matches what is stored in the Commons, so that the applicant will not be left with a false impression, that the submitted prefix has somehow been accepted and applied to his profile record. A prefix discrepancy will be considered a <i>warning</i> condition.</p>
1.2.1.3.3.6.2.1	NamePrefix	String	15	No	
1.2.1.3.3.6.2.2	NameSuffix	String	5	No	
1.2.1.3.3.6.2.3	FirstName	String	30	Yes	If AccountIdentifier is not supplied, this field is required
1.2.1.3.3.6.2.4	MiddleName	String	30	No	
1.2.1.3.3.6.2.5	LastName	String	30	Yes	If AccountIdentifier is not supplied, this field is required
1.2.1.3.3.6.3	ProjectRole	String	25	Yes	<p>Must be either 'PI/PD' or 'Other'</p> <p>There must be at least one record for the budget period with a project role of PI/PD.</p>
1.2.1.3.3.6.4	ProjectRoleDescription	String	80	No	<p>Required if ProjectRole is 'Other'</p> <p>Must not be included if ProjectRole is not 'Other'</p>
1.2.1.3.3.6.5	AppointmentType	N/A	N/A	No	
1.2.1.3.3.6.6	AppointmentMonths	Integer	2	No	Must be between 1 and 12
1.2.1.3.3.6.7	FundingMonths	N/A	N/A	No	
1.2.1.3.3.6.8	RequestedCost	Double	10, 2	Yes	If BaseSalary is specified, must be less than or equal to BaseSalary multiplied by PercentEffort for this person for this budget period.
1.2.1.3.3.6.9	FringeCost	Double	10, 2	No	
1.2.1.3.3.6.10	BaseSalary	Double	10, 2	No	
1.2.1.3.3.6.11	SalaryAndFringeTotal	Double	10	No	If specified, must equal sum of RequestedCost and FringeCost for this person for this budget period.
1.2.1.3.3.6.12	SalariesTotal	N/A	N/A	No	
1.2.1.3.3.6.13	FullTimeQuestion	Boolean	1	Yes	
1.2.1.3.3.6.14	PercentEffort	Integer	3	Yes	Must be between 1 and 100

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.3.3.7	EquipmentCosts	N/A	N/A	No	<p>Must be only one component, even though the schema allows for multiples. The multiplicity is intended for other agency use, but when submitted to NIH, only <i>one</i> summary cost can be provided. If multiple EquipmentCosts elements are submitted for the same budget period, this must be treated as an <i>error</i> condition.</p> <p>Entire component is optional, but if included, indicated subcomponents must be included.</p>
1.2.1.3.3.7.1	Cost	Double	10	Yes	
1.2.1.3.3.7.2	Description	String	2000	Yes	
1.2.1.3.3.7.3	Total	N/A	N/A	No	
1.2.1.3.3.8	TravelCosts	N/A	N/A	No	
1.2.1.3.3.9	ParticipantPatientCosts	N/A	N/A	No	<p>Entire component is optional but if present the indicated subcomponents must also be present.</p> <p>Despite the fact that the schema indicates unbounded occurrences, we can only accept up to two varieties, where:</p> <p>Type = "Inpatient" or Type = "Outpatient"</p> <p>We must ensure that only ONE inpatient type is supplied, per budget period (we can't accept two nodes that say they're "inpatient" for the same budget period). Likewise we would want only ONE outpatient node per period.</p> <p>If a node that indicates something <i>other</i> than these two types, disregard it. If we encounter two of the same type, for the same budget period, this should raise an error condition.</p>
1.2.1.3.3.9.1	Type	String	10	Yes	Must be Inpatient or Outpatient
1.2.1.3.3.9.2	Cost	Double	10	Yes	
1.2.1.3.3.9.3	Description	String	2000	No	
1.2.1.3.3.9.4	Total	N/A	N/A	No	
1.2.1.3.3.10	OtherDirectCosts	N/A	N/A	No	<p>Entire component is optional but if present the indicated subcomponents must also be present.</p> <p>If multiple components within a budget period, Type must be unique for each component.</p>
1.2.1.3.3.10.1	Type	String	20	Yes	Must be Alterations, Consultant, Other, Supplies, or Travel
1.2.1.3.3.10.2	Cost	Double	10	Yes	
1.2.1.3.3.10.3	Description	String	2000	No	<p>If Type='Consultant' and Budget Period=1, must be included.</p> <p>If Type='Travel' and Budget Period=1, must be included.</p> <p>If Type='Alterations' and Budget Period=1, must be included.</p> <p>If Type='Other' and Budget Period=1, must be included.</p>
1.2.1.3.3.11	SalariesWagesTotal	Double	10	No	If specified for budget period 1, must equal the sum of SalaryRequested and FringeBenefits for budget period 1.
1.2.1.3.3.12	EquipmentTotal	N/A	N/A	No	
1.2.1.3.3.13	TravelTotal	N/A	N/A	No	
1.2.1.3.3.14	ParticipantPatientTotal	N/A	N/A	No	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.3.3.15	OtherDirectTotal	N/A	N/A	No	
1.2.1.3.3.16	PeriodDirectCostsTotal	Double	10	Yes	If response to ModularBudgetQuestion is TRUE, must be <= 250K, must be a multiple of 25K If response to ModularBudgetQuestion is FALSE, provide warning if <= \$250K If response to ModularBudgetQuestion is FALSE, provide warning if >= 500K. If response to ModularBudgetQuestion is FALSE, for each budget period, must be equal to the sum of BudgetSummary.BudgetPeriod.NonConsortiumDirectCostSubtotal, BudgetSummary.BudgetPeriod.ConsortiumCosts.DirectCosts, and BudgetSummary.BudgetPeriod.ConsortiumCosts.IndirectCosts for the corresponding budget period
1.2.1.3.3.17	IndirectCostsTotal	Double	10	Yes	
1.2.1.3.3.18	PeriodCostsTotal	Double	10	Yes	Must be greater than 0 for first budget period. Must be greater than or equal to PeriodDirectCostsTotal Must be equal to the sum of PeriodDirectCostsTotal and IndirectCosts for the corresponding budget period.
1.2.1.3.3.19	ProgramIncomeDetails	N/A	N/A	No	Entire component is optional but if present the indicated subcomponents must also be present.
1.2.1.3.3.19.1	AnticipatedAmount	Double	10, 2	Yes	
1.2.1.3.3.19.2	Sources	String	150	Yes	
1.2.1.3.3.20	SalarySubtotals	N/A	N/A	No	
1.2.1.3.3.20.1	SalaryRequested	Double	10	No	If specified for budget period 1, must equal the sum of RequestedCost for each person for budget period 1.
1.2.1.3.3.20.2	FringeBenefits	Double	10	No	If specified for budget period 1, must equal the sum of FringeCost for each person for budget period 1.
1.2.1.3.3.21	NonConsortiumDirectCost Subtotal	Double	10	No	If specified, must equal the sum of the following elements for the corresponding budget period: <ul style="list-style-type: none"> BudgetSummary.BudgetPeriod.SalariesWagesTotal BudgetSummary.BudgetPeriod.OtherDirectCosts.Cost (Where OtherDirectCosts.Type = 'Consultant') BudgetSummary.BudgetPeriod.Equipment.Cost BudgetSummary.BudgetPeriod.OtherDirectCosts.Cost (Where OtherDirectCosts.Type = 'Supplies') BudgetSummary.BudgetPeriod.OtherDirectCosts.Cost (Where OtherDirectCosts.Type = 'Travel') BudgetSummary.BudgetPeriod.ParticipantPatientCosts.Cost (where ParticipantPatientCosts.Type = 'Inpatient') BudgetSummary.BudgetPeriod.ParticipantPatientCosts.Cost (where ParticipantPatientCosts.Type = 'Outpatient') BudgetSummary.BudgetPeriod.OtherDirectCosts.Cost (Where OtherDirectCosts.Type = 'Alterations') BudgetSummary.BudgetPeriod.OtherDirectCosts.Cost (Where OtherDirectCosts.Type = 'Other')
1.2.1.3.3.22	ConsortiumCosts	N/A	N/A	No	
1.2.1.3.3.22.1	DirectCosts	Double	10	No	
1.2.1.3.3.22.2	IndirectCosts	Double	10	No	
1.2.1.3.3.23	IndirectCostDetails	N/A	N/A	No	
1.2.1.3.3.23.1	BaseAmount	Double	10	No	
1.2.1.3.3.23.2	Rate	Double	10,2	No	
1.2.1.3.4	BudgetJustification	N/A	N/A	No	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.3.4.1	Text	String	500K	No	Must be supplied if BaseSalary is specified and RequestedCost is less than BaseSalary multiplied by PercentEffort. Must be supplied if an OtherDirectCost Type of 'Consultant' has been included. Must be supplied if an OtherDirectCost Type of 'Travel' has been included. Must be supplied if an OtherDirectCost Type of 'Alterations' has been included. Must be supplied if an OtherDirectCost Type of 'Other' has been included. Must be supplied if <EquipmentCosts><Cost> is included
1.2.1.3.4.2	FileIdentifier	N/A	N/A	No	
1.2.1.3.5	BudgetDirectCostsTotal	Double	10, 2	Yes	If response to ModularBudgetQuestion is FALSE, must be equal to the sum of PeriodDirectCostsTotal for each budget period.
1.2.1.3.6	BudgetIndirectCostsTotal	Double	10, 2	Yes	Must be equal to the sum of IndirectCostsTotal for each budget period.
1.2.1.3.7	BudgetCostsTotal	Double	10	Yes	Must be greater than or equal to PeriodCostsTotal for the first budget period.
					Must be greater than or equal to BudgetDirectCostsTotal
1.2.1.3.8	BudgetFeesTotal	N/A	N/A	No	
1.2.1.3.9	ModularBudgetQuestion	Boolean	1	Yes	
1.2.1.3.10	ModularBudgetDetails	N/A	N/A	No	
1.2.1.3.10.1	PersonnelExplanation	String	500K	No	
1.2.1.3.10.2	ConsortiumExplanation	String	500K	No	
1.2.1.3.10.3	FeeExplanation	N/A	N/A	No	
1.2.1.3.11	IndirectCostRateDetails	N/A	N/A	Yes	If BudgetPeriod IndirectCostsTotal>0 for any budget period, must have response (with corresponding content) in DHHSAgreementDate, DHHSAgreementNegotiationOffice, or NoDHHSAgreement
1.2.1.3.11.1	NoIndirectCostsRequested	Boolean	1	No	
1.2.1.3.11.2	DHHSAgreementDate	Date	N/A	No	
1.2.1.3.11.3	DHHSAgreementNegotiationOffice	String	60	No	
1.2.1.3.11.4	NoDHHSAgreement	Boolean	1	No	
1.2.1.3.11.4.1	AgencyName	String	60	No	
1.2.1.3.11.4.2	AgreementDate	Date	N/A	No	
1.2.1.3.11.5	BaseRateDescriptors	N/A	N/A	No	
1.2.1.3.11.5.1	SalaryAndWagesBase	Boolean	1	No	
1.2.1.3.11.5.2	ModifiedTotalDirectCostsBase	Boolean	1	No	
1.2.1.3.11.5.3	OtherBase	Boolean	1	No	
1.2.1.3.11.5.4	OffsiteOtherSpecialOrMultipleRate	Boolean	1	No	
1.2.1.3.11.5.5	Explanations	String	500K	No	
1.2.1.4	KeyPerson	N/A	N/A		Must be at least one component with a role of PI or PD. Must be only one component with a role of PI or PD. There cannot be both a PI and a PD.
1.2.1.4.1	OrganizationDUNS	String	10	No	Must match DUNS that is recorded for a valid NIH IPF entry.

Level	Component Path	Type	Max Size	Mandator y	Validation
1.2.1.4.2	AccountIdentifier	N/A	N/A	No	Must be specified for the PI/PD
					If specified, must be a valid Commons account.
					For the PI/PD, this account must be affiliated with the organization submitting the application (element 1.2.1.5) and have the PI role (element 1.2.1.4.13).
1.2.1.4.3	Name	N/A	N/A	Yes	<p>If the KeyPerson's Name <i>and</i> Commons Account Identifier are provided, then the name on the account must match the name that is provided in this component. No additional validation is necessary unless <i>both</i> components have been submitted for this KeyPerson.</p> <p>The algorithm for determining an acceptable match between KeyPerson Name and PPF name is as follows:</p> <ul style="list-style-type: none"> All elements of the name (first, last, middle, prefix, suffix) shall be compared <i>without</i> case sensitivity. All elements of the name shall be compared without regard to embedded spaces. Embedded punctuation <i>shall</i> be considered when making comparisons. Middle name does not need to match exactly. If the middle names do not match, but this is because the Commons or data stream is providing a middle initial only, then a second attempt will be made, using only the first character of the middle name. If there is <i>still</i> no match based on middle initial, this will be considered a fatal error condition. If the middle initials match, this will be considered a <i>warning</i> condition. <p>If provided with the data stream, the name prefix must match the Commons exactly. It is forgivable to exclude the prefix in the data stream, since this is not a critical element in a personal identification. However, if given, we must verify that it matches what is stored in the Commons, so that the applicant will not be left with a false impression, that the submitted prefix has somehow been accepted and applied to his profile record. A prefix discrepancy will be considered a <i>warning</i> condition.</p> <p>If the name for a key person is not provided at all, and only an AccountIdentifier is supplied, then the user shall be presented with a <i>warning</i> message alerting him/her to pay particular attention to the name that is generated in the grant image, since this will appear exactly as it is represented in the Commons PPF</p> <p>A Name MUST be supplied, if there is no AccountIdentifier. If both pieces of information are missing, this will be considered an <i>error</i>.</p>
1.2.1.4.3.1	NamePrefix	String	15	No	
1.2.1.4.3.2	FirstName	String	30	Yes	
1.2.1.4.3.3	MiddleName	String	30	No	
1.2.1.4.3.4	LastName	String	30	Yes	
1.2.1.4.3.5	NameSuffix	String	5	No	
1.2.1.4.4	ContactInformation	N/A	N/A	No	
1.2.1.4.4.1	PostalAddress	N/A	N/A	No	
1.2.1.4.4.1.1	Street (1..4)	String	50	No	
1.2.1.4.4.1.2	MailStopCode	String	50	No	.

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.4.4.1.3	City	String	35	No	
1.2.1.4.4.1.4	State	String	2	No	
1.2.1.4.4.1.5	PostalCode	String	9	No	
1.2.1.4.4.1.6	Country	Integer	3	No	
1.2.1.4.4.1.7	PhoneNumber	String	25	No	
1.2.1.4.4.1.8	FaxNumber	String	25	No	
1.2.1.4.4.1.9	Email	String	80	No	
1.2.1.4.5	PositionTitle	N/A	N/A	No	This title must appear on an employment record for this person and organization in Commons. Enforce this rule for the PD/PI only.
1.2.1.4.6	OrganizationName	String	40	No	If this is <u>not</u> the PI, and NO OrganizationDUNS has been supplied (see element 1.2.1.4.1), then the OrganizationName element is <i>required</i> . If neither the DUNS nor the org name has been supplied for a Key Person (other than the PI), this shall be treated as an <i>error</i> .
1.2.1.4.7	OrganizationDivision	String	80	Yes	Organization division is required for the PI.
1.2.1.4.8	OrganizationDepartment	String	80	Yes	Organization department is required for the PI.
1.2.1.4.9	AuthenticationCredential	N/A	N/A	No	
1.2.1.4.10	SocialSecurityNumber	N/A	N/A	N/A	
1.2.1.4.11	BiographicalSketch	N/A	N/A	No	
1.2.1.4.12	NIHBiographicalSketch	N/A	N/A	Yes	One biosketch is required for each key person.
1.2.1.4.12.1	PositionsHonorsCitationsFileIdentifier	PDF	2 pages	Yes	Must reference a valid file in SOAP message and the file should not be empty.
1.2.1.4.12.2	ResearchSupportFileIdentifier	PDF	2 pages	Yes	Must reference a valid file in SOAP message and the file should not be empty.
1.2.1.4.13	RoleOnProject	String	60	Yes	
1.2.1.5	ResearchCoverPage	N/A	N/A		
1.2.1.5.1	SubmissionCategory	N/A	N/A	No	
1.2.1.5.2	ApplicationCategory	N/A	N/A	Yes	
1.2.1.5.2.1	CategoryIdentifier	String	30	No	Must be one of the following valid values: N: New Application C: Continuation R: Revision
1.2.1.5.2.2	RevisionAction	N/A	N/A	No	
1.2.1.5.3	ApplicantSubmissionQualifiers	N/A	N/A	No	
1.2.1.5.4	FederalAgencyReceiptQualifiers	N/A	N/A	No	
1.2.1.5.5	StateReceiptQualifiers	N/A	N/A	No	
1.2.1.5.6	StateIntergovernmentalReview	N/A	N/A	No	
1.2.1.5.7	CFDAQuestions	N/A	N/A	No	
1.2.1.5.8	FederalDebtDelinquencyQuestions	N/A	N/A	No	
1.2.1.5.9	ProjectDates	N/A	N/A	Yes	
1.2.1.5.9.1	ProjectStartDate	Date	N/A	Yes	Must be later than current date
1.2.1.5.9.2	ProjectEndDate	Date	N/A	Yes	Must be later than ProjectStartDate
1.2.1.5.10	BudgetTotals	N/A	N/A	No	
1.2.1.5.11	ProjectTitle	String	81	Yes	Must match project title received on ticket
1.2.1.5.12	OtherAgencyQuestions	N/A	N/A	No	
1.2.1.5.13	ApplicantOrganization	N/A	N/A	Yes	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.5.13.1	OrganizationName	String	40	Yes	
1.2.1.5.13.2	OrganizationDUNS	String	10	Yes	Must match DUNS recorded for IPF in Commons.
1.2.1.5.13.3	OrganizationEIN	String	12	Yes	Must be a valid NIH EIN number, validated against EINS_T.
1.2.1.5.13.4	OrganizationTIN	N/A	N/A	No	
1.2.1.5.13.5	OrganizationAddress	N/A	N/A	Yes	
1.2.1.5.13.5.1	Street (1..3)	String	50	Yes	Must be between 1 and 3 Street components. If a fourth street component is supplied in the data stream, it must be rejected with the error message returned to the submitter.
1.2.1.5.13.5.2	Street (4)	N/A	N/A	No	
1.2.1.5.13.5.3	MailStopCode	String	50	No	The maximum length of 3rd Street component combined with the MailStopCode is 50
1.2.1.5.13.5.4	City	String	35	Yes	
1.2.1.5.13.5.5	State	String	2	No	Required if country is US or Canada. Must be a valid state or province abbreviation. If country is not US or Canada must be blank.
1.2.1.5.13.5.6	PostalCode	String	9	No	Required if country is US. Must be 5 or 9 numeric digits if country is US.
1.2.1.5.13.5.7	Country	Integer	3	Yes	Must be a valid ISO 3166-1 country code.
1.2.1.5.13.6	OrganizationCounty	String	32	No	
1.2.1.5.13.7	OrganizationalUnit	N/A	N/A	No	
1.2.1.5.13.8	OrganizationCongressional District	String	2	No	Must be a valid congressional district code.
1.2.1.5.13.9	OrganizationCategoryCode	N/A	N/A	No	
1.2.1.5.13.10	OrganizationCategoryDescription	N/A	N/A	No	
1.2.1.5.13.11	OrganizationContactPerson	N/A	N/A	Yes	
1.2.1.5.13.11.1	Name	N/A	N/A	Yes	The combination of all items in this component must be 30 characters or less
1.2.1.5.13.11.1.1	NamePrefix	String	30	No	
1.2.1.5.13.11.1.2	FirstName	String	30	Yes	
1.2.1.5.13.11.1.3	MiddleName	String	30	No	
1.2.1.5.13.11.1.4	LastName	String	30	Yes	
1.2.1.5.13.11.1.5	NameSuffix	String	30	No	
1.2.1.5.13.11.2	ContactInformation	N/A	N/A	Yes	
1.2.1.5.13.11.2.1	PostalAddress	N/A	N/A	Yes	
1.2.1.5.13.11.2.1.1	Street (1..3)	String	50	Yes	Must be between 1 and 3 Street components. If a fourth street component is supplied in the data stream, it must be rejected with the error message returned to the submitter. This is the approach for the pilot since the submitter will have no means to resubmit with corrections once an application has been accepted. If at some point we are able to allow corrections to come in via data stream, then this error/rejection can simply become a warning, since at that point the applicant would have a means by which to address the issue <i>after</i> the point of submission.
1.2.1.5.13.11.2.1.2	Street (4)	N/A	N/A	No	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.5.13. 11.2.1.3	MailStopCode	String	50	No	The maximum length of 3 rd Street component combined with the MailStopCode is 50
1.2.1.5.13. 11.2.1.4	City	String	35	Yes	
1.2.1.5.13. 11.2.1.5	State	String	2	No	Required if country is US or Canada. Must be a valid state or provide abbreviation. If country is not US or Canada, must be blank.
1.2.1.5.13. 11.2.1.6	PostalCode	String	9	No	Required if country is US. Must be 5 or 9 numeric digits if country is US.
1.2.1.5.13. 11.2.1.7	Country	Integer	3	Yes	Must be a valid ISO 3166-1 country code.
1.2.1.5.13. 11.2.2	PhoneNumber	String	25	Yes	
1.2.1.5.13. 11.2.3	FaxNumber	String	25	No	
1.2.1.5.13. 11.2.4	Email	String	80	Yes	Must contain a '@', with at least 1 and at most 64 characters preceding and following the '@'. Control characters (ASCII 0 through 31 and 127), spaces and the special characters < > () [] \ , ; : are not valid.
1.2.1.5.13. 11.3	PositionTitle	String	30	Yes	
1.2.1.5.13. 12	OrganizationClassification	N/A	N/A	No	
1.2.1.5.13. 12.1	CategoryCode	String	1	No	If present must match Category Code for Commons IPF.
1.2.1.5.13. 12.2	SubCategoryCode	String	1	No	If present must match Sub Category Code for Commons IPF.
1.2.1.5.14	PrimaryProjectSite	N/A	N/A	Yes	The first alternate project site cannot be the same as the primary project site (as defined by exact match of organization name and postal address components).
1.2.1.5.14. 1	AlternateProjectSites OrganizationName	String	100	Yes	
1.2.1.5.14. 2	PostalAddress	N/A	N/A	Yes	
1.2.1.5.14. 2.1	Street (1..4)	String	50	Yes	Must be between 1 and 4 Street components
1.2.1.5.14. 2.2	MailStopCode	String	50	No	The maximum length of 4 th Street component combined with the MailStopCode is 50
1.2.1.5.14. 2.3	City	String	35	Yes	
1.2.1.5.14. 2.4	State	String	2	No	Required if country is US or Canada. Must be a valid state or provide abbreviation. If country is not US or Canada, must be blank.
1.2.1.5.14. 2.5	PostalCode	String	9	No	Required if country is US. Must be 5 or 9 numeric digits if country is US.
1.2.1.5.14. 2.6	Country	Long	10	Yes	Must be a valid ISO 3166-1 country code.
1.2.1.5.14. 3	CountyName	N/A	N/A	No	
1.2.1.5.14. 4	CongressionalDistrict	N/A	N/A	No	
1.2.1.5.14. 5	AffectedAreas	N/A	N/A	No	
1.2.1.5.15	ProgramDirectorPrincipalInvestigator	N/A	N/A	Yes	
1.2.1.5.15. 1	NewInvestigatorQuestion	Boolean	1	Yes	
1.2.1.5.15. 2	AccountIdentifier	String	30	Yes	Must match the AccountIdentifier supplied for the PI/PD role in 1.2.1.4.2
1.2.1.5.15. 3	DirectorInvestigatorSignature	N/A	N/A	No	
1.2.1.5.15. 3.1	SignatureAuthentication	String	2000	No	
1.2.1.5.15. 3.2	SignatureDate	Date	N/A	No	

Level	Component Path	Type	Max Size	Mandator y	Validation
1.2.1.5.15.4	Name	N/A	N/A	No	<p>If the PI's Name <i>and</i> Commons Account Identifier are provided, then the name on the account must match the name that is provided in this component. No additional validation is necessary unless <i>both</i> components have been submitted for this KeyPerson.</p> <p>The algorithm for determining an acceptable match between PD/PI Name and PPF name is as follows:</p> <ul style="list-style-type: none"> • All elements of the name (first, last, middle, prefix, suffix) shall be compared <i>without</i> case sensitivity. • All elements of the name shall be compared without regard to embedded spaces. • Embedded punctuation <i>shall</i> be considered when making comparisons. • Middle name does not need to match exactly. If the middle names do not match, but this is because the Commons or data stream is providing a middle initial only, then a second attempt will be made, using only the first character of the middle name. If there is <i>still</i> no match based on middle initial, this will be considered a fatal error condition. If the middle initials match, this will be considered a <i>warning</i> condition. • <i>If provided</i> with the data stream, the name prefix must match the Commons exactly. If given, we must verify that it matches what is stored in the Commons. A prefix discrepancy will be considered a <i>warning</i> condition. <p>If the name for the PD/PI is not provided at all, and only an AccountIdentifier is supplied, then the user shall be presented with a <i>warning</i> message alerting him/her to pay particular attention to the name that is generated in the grant image, since this will appear exactly as it is represented in the Commons PPF</p> <p>A Name MUST be supplied, if there is no AccountIdentifier. If both pieces of information are missing, this will be considered an <i>error</i>.</p>
1.2.1.5.15.4.1	NamePrefix	String	15	No	
1.2.1.5.15.4.2	FirstName	String	30	Yes	
1.2.1.5.15.4.3	MiddleName	String	30	No	
1.2.1.5.15.4.4	LastName	String	30	Yes	
1.2.1.5.15.4.5	NameSuffix	String	5	No	
1.2.1.5.15.5	ContactInformation	N/A	N/A	Yes	<p>For PI/PD the entire ContactInformation must match the preferred employment address recorded for this account and organization in the Commons.</p> <p>Every component of the data stream contact information must match its PPF employment address equivalent. The only exception will be that differences in capitalization, punctuation or white space will be ignored when comparing the data stream information to the PPF. Any discrepancy will be treated as an error condition.</p> <p>Note that Commons does not separately track MailStopCode. For verification purposes this is considered part of the fourth address line.</p>

Level	Component Path	Type	Max Size	Mandatory	Validation
					As with the PI name, the validation of contact information is only applied if <i>any</i> of the contact information is supplied in the data stream. The absence of contact information shall be interpreted as an affirmation that whatever is on file in the Commons should be used. If contact information is omitted altogether, it will be useful to at least issue a warning at the point of receipt, so that the applicant is alert to verify the contact information when it comes time to verify the grant image.
1.2.1.5.15.5.1	PostalAddress	N/A	N/A	Yes	
1.2.1.5.15.5.1.1	Street (1..4)	String	50	Yes	Must be between 1 and 4 Street components
1.2.1.5.15.5.1.2	MailStopCode	String	50	No	
1.2.1.5.15.5.1.3	City	String	35	Yes	
1.2.1.5.15.5.1.4	State	String	2	No	
1.2.1.5.15.5.1.5	PostalCode	String	9	No	The comparison on zip code must ignore hyphens or other punctuation and embedded spaces.
1.2.1.5.15.5.1.6	Country	Integer	3	Yes	
1.2.1.5.15.5.1.7	PhoneNumber	String	25	Yes	The comparison on phone number must ignore hyphens, parentheses, other punctuation, and embedded spaces.
1.2.1.5.15.5.1.8	FaxNumber	String	25	No	The comparison on fax number must ignore hyphens, parentheses, other punctuation, and embedded spaces.
1.2.1.5.15.5.1.9	Email	String	80	Yes	
1.2.1.5.15.6	Degree (1..3)	String	10	No	<p><i>Note: validations regarding degrees are not case-, space-, or punctuation-sensitive. In other words, any differences in upper/lower case, embedded spaces, and punctuation shall be disregarded when enforcing the following rules.</i></p> <p>The face page degrees must be a subset of the Commons PPF degrees (for the PI). Some flexibility must be allowed when doing this comparison. Since an applicant may indicate degree designations which are not adequately described by our established set of degree codes, we should match each face page degree against:</p> <ul style="list-style-type: none"> ➤ <i>Degree Code</i> if the PPF degree code is not one of the "other" degree types ➤ <i>Other Degree Text</i> if the PPF degree code is one of the "other" degree types <p>As long as a match can be established for each face page degree based on one of these criteria, they will be deemed acceptable. Any degree that cannot be matched against the Commons PPF information will be treated as an error condition.</p>
					Provide a warning if no degrees have been included in the data stream, or if tag has been included but is empty.
1.2.1.5.16	FundingOpportunityDetails	N/A	N/A	No	
1.2.1.5.16.1	FundingOpportunityNumber	String	10	No	<p>Must be a valid NIH RFA/PA number, validated against RFA_PA_NOTICES_T.</p> <p>The RFA_PA_NOTICES_T active_code must = 'Y'</p> <p>RFA_PA_NOTICES_T.expiration_date cannot be less than the current date/SYSDATE</p> <p>If FundingOpportunityResponseCode='Y', and/or if FundingOpportunityTitle has been entered, must be entered</p>
1.2.1.5.16.2	FundingOpportunityTitle	String	200	No	If FundingOpportunityResponseCode='Y', and/or if FundingOpportunityNumber has been entered, must be entered

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.1.5.16.3	FundingOpportunityResponseCode	String	30	No	If FundingOpportunityNumber and/or FundingOpportunityTitle has been entered, must be 'Y'
1.2.1.5.17	AuthorizedOrganizationalRepresentative	N/A	N/A	Yes	
1.2.1.5.17.1	Name	N/A	N/A	Yes	
1.2.1.5.17.1.1	NamePrefix	String	15	No	
1.2.1.5.17.1.2	FirstName	String	30	Yes	
1.2.1.5.17.1.3	MiddleName	String	30	No	
1.2.1.5.17.1.4	LastName	String	30	Yes	
1.2.1.5.17.1.5	NameSuffix	String	5	No	
1.2.1.5.17.2	ContactInformation	N/A	N/A	Yes	
1.2.1.5.17.2.1	PostalAddress	N/A	N/A	Yes	
1.2.1.5.17.2.1.1	Street (1..4)	String	50	Yes	
1.2.1.5.17.2.1.2	MailStopCode	String	50	No	
1.2.1.5.17.2.1.3	City	String	35	Yes	
1.2.1.5.17.2.1.4	State	String	2	No	
1.2.1.5.17.2.1.5	PostalCode	String	9	No	
1.2.1.5.17.2.1.6	Country	Integer	3	Yes	
1.2.1.5.17.2.1.7	PhoneNumber	String	25	Yes	
1.2.1.5.17.2.1.8	FaxNumber	String	25	No	
1.2.1.5.17.2.1.9	Email	String	80	Yes	
1.2.1.5.17.3	OrganizationalOfficialSignature	N/A	N/A	No	
1.2.1.5.17.3.1	SignatureAuthentication	String	2000	No	
1.2.1.5.17.3.2	SignatureDate	Date	N/A	No	
1.2.1.5.17.4	PositionTitle	String	30	No	
1.2.2	ResearchApplicationExtension	N/A	N/A	N/A	
1.2.2.1	NewApplicationQualifiers	N/A	N/A	No	
1.2.2.1.1	SBIRQuestions	N/A	N/A	No	
1.2.2.1.2	STTRQuestions	N/A	N/A	No	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.2.2	RevisionOfApplicationNumber	N/A	N/A	No	<p>Entire component is optional but if present the indicated (mandatory) subcomponents must also be present.</p> <p>If CategoryIdentifier (1.2.1.5.2.1)='R', this component is mandatory</p> <p>The prior grant number must exist in the NIH system and be associated with this organization (element 1.2.15.13.1). See section 10.1.2 for how prior grant is defined for a Revision.</p> <p>Matching is performed strictly against the AdministeringOrganization ID and SerialNumber alone. The applicant needs to supply the other components of the grant number (so the full prior number will appear on the checklist), but is not required to get them right.</p> <p>If PIChangeIndicator is not set, PI on this submission must have the same Commons Account (KeyPerson.AccountIdentifier) as the PI assigned to the prior grant (see section 10.1.2 for how prior grant is defined for a Revision).</p> <p>... or if the person profile match fails...</p> <p>The last name of the PI assigned to the prior grant matches the last name that is submitted for the PI on the current application.¹ (see warning text, in the right hand column, which must be provided when a last name match is necessary to confirm valid prior assignment). This match must <u>not</u> be case-sensitive, and should compare only the non-blank, non-punctuation characters that appear in the last name.</p> <p>A summary statement must have been mailed for the prior grant (see below for how prior grant is defined)</p> <p>The prior grant must not have been awarded, unless it has been identified as interim funding.</p> <p>If the prior grant suffix code='A2', display a warning. See below for how prior grant is defined.</p> <p>Prior grant suffix code must not ='A3', (see below for how prior grant is defined)</p>
1.2.2.2.1	ApplicationTypeCode	String	1	Yes	
1.2.2.2.2	ActivityCode	String	3	Yes	
1.2.2.2.3	AdministeringOrganizationID	String	2	Yes	
1.2.2.2.4	SerialNumber	Long	6	Yes	
1.2.2.2.5	SupportYear	Integer	2	Yes	
1.2.2.2.6	SuffixCode	String	4	No	
1.2.2.3	CompetingContinuationQualifiers	N/A	N/A	No	<p>Entire component is optional but if present the indicated subcomponents must also be present.</p> <p>If CategoryIdentifier (1.2.1.5.2.1)='C', CompetingContinuationQualifiers component is mandatory</p>
1.2.2.3.1	PriorGrantNumber	N/A	N/A	Yes	<p>Must be a valid NIH application number that exists in the database. Matching is performed strictly against the AdministeringOrganizationID and SerialNumber alone. The applicant needs to supply the other components of the grant number (so the full prior number will appear on the checklist), but is not required to get them right.</p> <p>If PIChangeIndicator is not set, PI must be assigned to the prior grant (see below for how prior grant is defined): The PI assigned to the grant must map to the same person profile that is associated with the submitted PI Commons Account (see KeyPerson. AccountIdentifier, above)</p> <p>... or if the person profile match fails...</p> <p>The last name of the PI assigned to the prior grant must match the last name that is submitted for the PI on the current application. This match must <u>not</u> be case-sensitive, and should compare only the non-blank, non-punctuation characters that appear in the last name.</p>
1.2.2.3.1.1	ApplicationTypeCode	String	1	Yes	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.2.3.1.2	ActivityCode	String	3	Yes	
1.2.2.3.1.3	AdministeringOrganizationID	String	2	Yes	
1.2.2.3.1.4	SerialNumber	Long	6	Yes	
1.2.2.3.1.5	SupportYear	Integer	2	Yes	
1.2.2.3.1.6	SuffixCode	String	4	No	
1.2.2.3.2	InventionsAndPatents	N/A	N/A	No	
1.2.2.3.2.1	InventionsPreviouslyReported	String	0	No	
1.2.2.3.2.2	InventionsNotPreviouslyReported	String	0	No	
1.2.2.3.2.3	NoInventions	String	0	No	
1.2.2.4	SupplementGrantNumber	N/A	N/A	No	Must be a valid NIH application number associated with this organization (element 1.2.1.5.13.1)
1.2.2.4.1	ApplicationTypeCode	String	1	No	
1.2.2.4.2	ActivityCode	String	3	No	
1.2.2.4.3	AdministeringOrganizationID	String	2	Yes	
1.2.2.4.4	SerialNumber	Long	6	Yes	
1.2.2.4.5	SupportYear	Integer	2	No	
1.2.2.4.6	SuffixCode	String	4	No	
1.2.2.5	PIChangeIndicator	Boolean	30	No	
1.2.2.5.1	FormerPIName	String	30	No	
1.2.2.6	ForeignApplicationIndicator	Boolean	30	No	
1.2.2.7	SmokeFreeWorkplaceIndicator	Boolean	30	No	
1.2.2.8	ResearchPlan	N/A	N/A	No	
1.2.2.8.1	RevisedApplicationIntroAttachment	PDF	3 pages	No	Required if CategoryIdentifier='R' Limited to one page if prior grant activity code is 'R03'.
1.2.2.8.2	SupplementalApplicationIntroAttachment	PDF	1 page	No	
1.2.2.8.3	Narrative	PDF	25 pages	No	
1.2.2.8.3.1	SpecificAims	PDF		No	
1.2.2.8.3.2	BackgroundAndSignificance	PDF		No	
1.2.2.8.3.3	PreliminaryStudies	PDF		No	Must be included if CategoryIdentifier='N', or if CategoryIdentifier='R' and the RevisionOfApplicationNumber.ApplTypeCode='1'.
1.2.2.8.3.4	ProgressReport	PDF		No	Must be included if CompetingContinuationQualifier component is included, or if RevisionOfApplicationNumber component is included and the PriorGrantNumber.ApplTypeCode='2'.
1.2.2.8.3.5	ResearchDesignAndMethods	PDF		No	
1.2.2.8.4	HumanSubjects	PDF	50 pages	No	Required if HumanSubjectUsedQuestion (item 1.2.1.1.1.1) is Y
1.2.2.8.5	VertebrateAnimals	PDF	50 pages	No	Required if VertebrateAnimalsUsedQuestion (item 1.2.1.1.2.1) is Y
1.2.2.8.6	LiteratureCited	PDF	50 pages	Yes	
1.2.2.8.7	ConsortiumAndContractualArrangements	PDF	50 pages	No	
1.2.2.8.8	Consultants	PDF	50 pages	No	
1.2.2.8.9	ProductDevelopmentPlan	BFILE	N/A	No	
1.2.2.8.10	DataSharingPlan	PDF	50 pages	No	

Level	Component Path	Type	Max Size	Mandatory	Validation
1.2.2.9	AssuranceAndCertificationCompliance	N/A	N/A	No	
1.2.2.9.1	YesNoAnswer	Boolean	1	No	
1.2.2.9.2	Explanation	String	2000	No	Required if YesNoAnswer is N
1.2.2.10	InvestigatorCoverLetter	PDF		No	

Defining Prior Grants for Competing Continuations and Revisions

Type of Application	How Prior Grant is Defined
Competing Continuation	Prior grant is defined by PriorGrantNumber.AdministeringOrganizationID and PriorGrantNumber.SerialNumber, with the latest encumbrance date.
Revision	Prior grant is defined by PriorGrantNumber.AdministeringOrganizationID and PriorGrantNumber.SerialNumber, with the latest created date. Administrative Supplements (supplements where the month portion of the council date is '00') and subprojects should be excluded from the search.